(1) PROVIDE PREMIUM EFFICIENCY INVERTOR DUTY MOTOR WITH SHAFT GROUNDING RING FOR EACH SUPPLY FAN. VARIABLE FREQUENCY DRIVE(S) TO BE PROVIDED BY MECHANICAL CONTRACTOR. (2) PROVIDE PIPING AND WIRING CONNECTIONS AND INSULATED DOUBLE WALL ACCESS DOORS ON SIDE OF UNIT THAT WILL ALLOW GREATEST ACCESSIBILITY. SEE PLANS FOR UNIT ORIENTATIONS.

(3) PROVIDE WITH 4" MERV 13 FILTERS. AIR HANDLING UNIT SHALL NOT BE OPERATED AT ANY TIME WITHOUT FILTER MEDIA INSTALLED AS RECOMMENDED BY UNIT MANUFACTURER.

(4) PROVIDE WITH FACTORY WEATHER HOOD WITH MODULATING OSA DAMPER AND BIRD SCREEN. OSA FLOW RATE TO BE SET BY TAB CONTRACTOR AT PROJECT COMPLETION.

(5) PROVIDE WITH UV LIGHT PACKAGE IN COOLING COIL SECTION. REFER TO UV LIGHT PACKAGE SCHEDULE FOR REQUIREMENTS.

(6) PROVIDE WITH SERVICE LIGHTS IN EACH ACCESSIBLE SECTION (TO BE FIELD WIRED BY ELECTRICIAN). (7) PROVIDE WITH FAN BACKDRAFT DAMPER FOR EACH SUPPLY FAN IN A DUAL FAN UNIT.

(8) PROVIDE WITH SUPPLY AND RETURN SMOKE DETECTORS. (9) PROVIDE WITH IFB SIDE HEATER COIL.

	BLOW	ER C	OIL UN	NIT S	CHI	EDU	ILE																						
DECIC	MFR/MDL	AREA	LOCAT.	TYPE -	OSA		FAN D	ATA					- ` (- `	HILLED WA	TER C	OIL A					S. S. PI	RE-HEA	TING W	/ATER	COIL		· MO	TOR DATA	REMARKS
DESIG.		SERVED	LOCA I.	·IIIPE	CFM	CFM	ESP/TSP	TYPE	DÍA.	EAT	LAT	MBH TOTAL	MBH SENS.	EWT LWT	GPM	W.P.D.	ROW/FIN	FACE VELOCITY	APD	EAT/LAT	EWT/LWT	GPM	W.P.D.	MBH	ROW/FIN	FACE VELOCITY A	PD BHP	HP VOLT/PI	(NOTES)
BCU-1	DAIKIN / BCHD0201	PRO SHOP RETAIL	FIRST FLOOR BAG STORAGE	HORIZ.	625	1,900	0.5"/1.65"	FC	10.0"	80.3° d.b. 69.0° w.b.	52.8° d.b. 52.6° w.b.	97.3	57.1	42° F 56.0° F	14	14.2'	6R/12 FPI	471 FPM	0.71"	30.0°/105.4°	180°/150.1°	6.0	9.4'	78.3	1R/12 FPI	235.5 FPM (HEATING) 0	.04" 0.94	1 (x2) 115 / 1ø	(1) (2) (3) (4) (5) (6) 950 HEATING CFM.
BCU-2	DAIKIN / BCHD0061	PRO SHOP OFFICES	FIRST FLOOR BAG STORAGE	HORIZ.	240	580	0.5"/1.97"	FC	10.0"	80.3° d.b. 69.0° w.b.	51.8° d.b. 51.6° w.b.	31.1	18.0	42° F 55.9° F	5	18.4'	6R/16 FPI	478 FPM	0.99"	30.0°/105.8°	180°/150.0°	2.0	11.7'	24.0	1R/12 FPI	238.6 FPM (HEATING) 0	.04" 0.33	1 115 / 1ø	(1) (2) (3) (4) (5) (6) 290 HEATING CFM.
BCU-3	DAIKIN / BCVD0501	LOWER LEVEL BAR AREA	FIRST FLOOR MECH. ROOM	VERT.	1,435	4,500	1.0"/2.34"	AF	13.0"	81.2° d.b. 69.8° w.b.	51.0° d.b. 51.0° w.b.	262.6	148.7	42° F 56.0° F	38	7.3'	6R/16 FPI	443 FPM	0.89"	24.0°/101.3°	180°/150.2°	13.0	1.2'	190.2	1R/12 FPI	221.5 FPM (HEATING) 0	.03" 3.2	5 460 / 3ø	(1) (2) (3) (4) (5) (6) 2,250 HEATING CFM. PROVIDE WITH VFD.

(1) PROVIDE PIPING AND WIRING CONNECTIONS AND INSULATED ACCESS DOORS ON SIDE OF UNIT THAT WILL ALLOW GREATEST ACCESSIBILITY. SEE PLANS FOR UNIT ORIENTATIONS. (2) PROVIDE PREMIUM EFFICIENCY DIRECT DRIVE MOTOR FOR SUPPLY FAN WITH MODULATING FAN CONTROL. MAINTAIN MINIMUM AIRFLOW LISTED IN REMARKS FOR HEATING MODE. (3) PROVIDE WITH 4" MERV 13 FILTERS. BLOWER COIL UNIT SHALL NOT BE OPERATED AT ANY TIME WITHOUT FILTER MEDIA INSTALLED AS RECOMMENDED BY UNIT MANUFACTURER. (4) PROVIDE WITH UV LIGHT PACKAGE IN COOLING COIL SECTION. REFER TO UV LIGHT PACKAGE SCHEDULE FOR REQUIREMENTS.

(5) PROVIDE WITH AUXILIARY RE-HEAT COIL. REFER TO RE-HEAT COIL SCHEDULE. (6) PROVIDE WITH SUPPLY AND RETURN SMOKE DETECTORS.

*CHILLER TO HAVE STAND-ALONE LOCAL INTERFACE THRU FACTORY MOUNTED CONTROLLER (CONTROL BOX TO BE POWER EXHAUSTED), AND SEPARATE 120V POWER CONNECTION FOR FREEZE PROTECTION.

HVAC GENERAL NOTES

- DUE TO THE SMALL SCALE OF THIS DRAWING, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL INVESTIGATE THE STRUCTURAL AND FINISH CONDITIONS AFFECTING THE WORK AND SHALL COORDINATE AND ARRANGE HIS WORK ACCORDINGLY.
- ROUND BRANCH DUCT RUNOUTS SHALL BE SAME SIZE AS DIFFUSER THROAT UNLESS OTHERWISE NOTED.
- FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTIONS TO DIFFUSERS. A MAXIMUM LENGTH OF THREE FEET (3') SHALL BE USED.
- 4. ALL CEILING-MOUNTED SUPPLY DIFFUSERS SHALL HAVE FOUR-WAY (4-WAY) PATTERN UNLESS OTHERWISE
- WHERE MANUAL DAMPERS ARE INSTALLED IN EXTERNALLY INSULATED DUCTWORK, PROVIDE STAND-OFF BRACKET TO PREVENT COMPRESSION OF INSULATION BY DAMPER OPERATOR HANDLE.
- 6. PROVIDE TURNING VANES IN ALL 90-DEGREE ELBOWS.
- PROVIDE SLEEVES THROUGH WALLS AND FLOORS. SEAL EXCESS OPENING WITH WATER-PROOF SEALANT. COORDINATE LOCATIONS AND SIZES OF SLEEVES WITH GENERAL CONTRACTOR. SLEEVES SHALL PROVIDE A MAXIMUM OF 1" CLEARANCE BETWEEN DUCT OR PIPE AND SLEEVE. SEAL PENETRATION IN FIRE/SMOKE RATED WALLS AND FLOOR WITH AN APPROVED FIRE/SMOKE BLOCK SEALANT.
- 8. EXTERNALLY INSULATE SUPPLY, RETURN, RELIEF, AND OUTSIDE AIR DUCTWORK UNLESS NOTED OTHERWISE. INTERNALLY LINED DUCT IS SHOWN CROSSHATCHED ON THE FLOOR PLAN.
- 9. EXHAUST DUCTWORK SHALL BE UN-INSULATED, UNLESS NOTED OTHERWISE.
- 11. INSULATE THE TOP OF ALL SUPPLY AIR DIFFUSERS WITH

10. EXTERNALLY INSULATE LOW-VELOCITY ROUND RUNOUT

- A MINIMUM OF 1/2" THICK FIBERGLASS DUCT WRAP. 2. MOUNT THERMOSTATS AT 48" A.F.F. OR MATCH LIGHT
- SWITCH HEIGHT. 13. ARRANGE PIPING TO ALLOW FOR PROPER SERVICE & ACCESS TO EQUIPMENT. INSTALL UNIONS AND ISOLATION VALVES TO ALLOW FOR REMOVAL OF EQUIPMENT WITHOUT DISTURBING MAINS.
- 14. REFER TO REFLECTED CEILING PLAN FOR EXACT DIFFUSER LOCATIONS.
- 15. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF FIRE AND SMOKE RATED PARTITIONS.
- 16. COORDINATE LOCATION OF DUCTS AND DIFFUSERS WITH STRUCTURAL FRAMING MEMBERS. OFFSET DUCTS AS REQUIRED TO CLEAR STRUCTURAL MEMBERS.
- 17. COORDINATE LOCATIONS AND ELEVATION OF DUCT RUNS WITH PLUMBING, SPRINKLER, AND ELECTRICAL CONTRACTORS.
- 18. COORDINATE MAKE-UP WATER AND GAS REQUIREMENTS WITH PLUMBING CONTRACTOR.
- 19. PROVIDE ACCESS DOORS IN DUCTS FOR ALL FIRE DAMPERS. PROVIDE CEILING ACCESS DOORS FOR DAMPERS ABOVE GYP. BD. CEILINGS.
- 20. DUCT DIMENSIONS ARE REQUIRED FREE AREA AND DO NOT ACCOUNT FOR INTERNAL INSULATION THICKNESS. INCREASE DUCT SIZES WHERE INTERNAL INSULATION IS SHOWN TO ACHIEVE THE REQUIRED FREE AREA.

	C	HILLER	SCHE	DUL	E (AIF	R COC	DLED))*															
, <u>, , , , , , , , , , , , , , , , , , </u>	ESIG.	MFR/MDL	TYPE	TONS	AMBIENT	INPUT	IPLV (EER)	GPM	GPM (MHN)	EVAPO P.D.	PRATOR EWT	LWT	QTÝ,-	COMPR		ELECTRICAL DAT		NDENSER FAN	IS FLA (EACH)	PC VOLT/PH	WER DA	TA MOP	- REMARKS
	CH-1	DAIKIN / AGZ140E	AIR-COOLED SCROLL	140 (NOMINAL)	115°	191.8	17.24	205	137.1	4.2'	56.0°	42.0°	4	(2) @ (2) @	310, (2) 408 (2)	@ 54.5, @ 73.0)		3.6	460/3Ø	316	350	FOUR COMPRESSORS, DUAL REFRIGERANT CIRCUITS. PROVIDE WITH FACTORY DISCONNECT, HIGH AMBIENT RATING PACKAGE, LOW AMBIENT PACKAGE, SINGLE POINT WIRING, DIFFERENTIAL PRESSURE SWITCH, COMPRESSOR SERVICE ISOLATION VALVES, CONDENSER FAN VFD(S), PHASE VOLTAGE MONITOR, BACNET INTERFACE, LOUVERED HAIL GUARDS, INLET STRAINER, PAINTED BASE RAIL, CHILLER VIBRATION ISOLATION, 2 YEAR REFRIGERANT WARRANTY, AND 5 YEAR COMPRESSOR WARRANTY.
	CH-2	DAIKIN / AGZ140E	AIR-COOLED SCROLL	140 (NOMINAL)	115°	191.8	17.24	205	137.1	4.2'	56.0°	42.0°	4	(2) @ (2) @	, (,	@ 54.5, @ 73.0)		3.6	460/3Ø	316	350	FOUR COMPRESSORS, DUAL REFRIGERANT CIRCUITS. PROVIDE WITH FACTORY DISCONNECT, HIGH AMBIENT RATING PACKAGE, LOW AMBIENT PACKAGE, SINGLE POINT WIRING, DIFFERENTIAL PRESSURE SWITCH, COMPRESSOR SERVICE ISOLATION VALVES, CONDENSER FAN VFD(S), PHASE VOLTAGE MONITOR, BACNET INTERFACE, LOUVERED HAIL GUARDS, INLET STRAINER, PAINTED BASE RAIL, CHILLER VIBRATION ISOLATION, 2 YEAR REFRIGERANT WARRANTY, AND 5 YEAR COMPRESSOR WARRANTY.

	LEGEN	<u>1D</u>	
\boxtimes	CEILING DIFFUSER		AIR VENT (AUTO/HAND)
	RETURN AIR GRILLE (RA)	——————————————————————————————————————	BUTTERLFLY VALVE
	THE FORWART GRALEE (1971)		AUTOMATIC CONTROL VALVE (3-WAY)
	EXHAUST REGISTER (ER)		AUTOMATIC CONTROL VALVE
624 CD-1 100 CFM	SIZE - DESIGNATION		CHECK VALVE
100 CFM	CUBIC FEET PER MINUTE		FLEXIBLE CONNECTOR (BRAIDED)
	FLEXIBLE DUCT CONNECTOR		GATE VALVE
₹	TURNING VANES		GLOBE VALVE (STRAIGHT)
		<u> </u>	PLUG VALVE
	SPLITTER DAMPER (TEE)	¥	PRESSURE GAUGE (W/COCK)
▎ ▕ ▗ ▎		9	PRESSURE GAUGE
	INTERNALLY INSULATED DUCTWORK	<u> </u>	PRESSURE RELIEF VALVE
M.D.	MANUAL DAMPER		PRESSURE AND TEMPERATURE TAP
 		$\overline{}$	REDUCER (CONCENTRIC)
	OPPOSED BLADE DAMPER		REDUCER (ECCENTRIC)
φ	DIAMETER		STRAINER (WITH BLOW DOWN VALVE)
Θ	OVAL		THERMOMETER
Ū,	THERMOSTAT / HUMIDISTAT	→	TO FLOOR DRAIN
Θ_{5}	(WITH UNIT NUMBER) HUMIDISTAT	$\dashv \vdash \vdash \mid \vdash$	UNION (FLANGED, SCREWED)
		— CHS —	CHILLED WATER SUPPLY
M-1 DETAIL	TOP NUMBER REFERS TO THE DETAIL	— CHR —	CHILLED WATER RETURN
	NUMBER. BOTTOM NUMBER REFERS TO THE SHEET WHERE DETAIL IS SHOWN	— HWS—	HEATING WATER SUPPLY
2 M-2		— HWR—	HEATING WATER RETURN
SECTION		D	DRAIN
	CONNECT TO EXISTING		

DUCT SMOKE DETECTOR

LOW VOLTAGE CONTROLS POWER TRANSFORMER HEAT TRACE CONTROLLER

DECIC	MFR/MDL	SERVES	LOCAT.	TYPE	GPM	HEAD	EFF.	, , , , , , , , , , , , , , , , , , ,	MOTO	OR DATA		DEMARKO	
DESIG.		SERVES!	LOCAT.	, JYPE.,,	GPW 1	ПЕДО		BHP	, HP.	RPM VOLT/PH		REMARKS	
P-1	BELL & GOSSETT SERIES e-80SC 5x5x11	CHILLED WATER	MECH. RM.	SP. COUP. VERTICAL IN-LINE	600	80'	78.5%	15.4	20	1,770	460/3Ø	CHILLED WATER PRIMARY - VARIABLE VOLUME. PROVIDE SUCTION GUIDE WITH START-UP / PERMANENT STRAINERS & PREMIUM EFFICIENCY MOTORS.	
P-2 (FUTURE)	BELL & GOSSETT SERIES e-80SC 5x5x11	CHILLED WATER	MECH. RM.	SP. COUP. VERTICAL IN-LINE	600	80'	78.5%	15.4	20	1,770	460/3Ø	CHILLED WATER PRIMARY - VARIABLE VOLUME. PROVIDE SUCTION GUIDE WITH START-UP / PERMANENT STRAINERS & PREMIUM EFFICIENCY MOTORS. FUTURE, NOT IN CONTRACT.	
P-3	BELL & GOSSETT SERIES e-80SC 4x4x11B	HEATING WATER	MECH. RM.	SP. COUP. VERTICAL IN-LINE	325	80'	72.4%	9.0	15	1,750	460/3Ø	HEATING WATER SECONDARY - VARIABLE VOLUME. PROVIDE SUCTION GUIDE WITH START-UP / PERMANENT STRAINERS & PREMIUM EFFICIENCY MOTORS.	
P-4 (FUTURE)	BELL & GOSSETT SERIES e-80SC 4x4x11B	HEATING WATER	MECH. RM.	SP. COUP. VERTICAL IN-LINE	325	80'	72.4%	9.0	15	1,750	460/3Ø	HEATING WATER SECONDARY - VARIABLE VOLUME. PROVIDE SUCTION GUIDE WITH START-UP / PERMANENT STRAINERS & PREMIUM EFFICIENCY MOTORS. FUTURE, NOT IN CONTRACT.	

	HOT WATER	RE-H	IEAT C	OIL S	CHED	ULE									
DESIG.	MFR/MDL	AREA SERVED	LOCAT.	UNIT SERVED	TYPE	CFM	EAT/LAT		/- / -	G WAT W.P.D.	,	OIL ROW/FIN	FACE VELOCITY	APD	REMARKS
RHC-1	DAIKIN / 5WQ1001C	PRO SHOP RETAIL	PRO SHOP BAG STORAGE	BCU-1	HOT WATER HEATING COIL	1900	52.2/75.8	160.0/129.0	3.5	0.3	48.9	1/10	584.6	0.22	PROVIDE WITH 1 1/2" COIL CONNECTIONS. COIL TO BE INSTALLED IN SUPPLY AIR DUCTWORK ON BCU UNIT SERVED.
RHC-2	DAIKIN / 5WH1002B	PRO SHOP OFFICES	PRO SHOP BAG STORAGE	BCU-2	HOT WATER HEATING COIL	580	51.8/75.1	160.0/129.9	1	0.1	14.7	2/10	580.0	0.24	PROVIDE WITH 2 1/2" COIL CONNECTIONS. COIL TO BE INSTALLED IN SUPPLY AIR DUCTWORK ON BCU UNIT SERVED.
RHC-3A	DAIKIN / 5WQ1201B	LOWER LEVEL BAR AREA	FIRST FLOOR MECH. ROOM	BCU-3	HOT WATER HEATING COIL	2300	51.0/75.2	160.0/129.8	4	0.8	60.8	1/12	552.0	0.14	PROVIDE WITH 1 1/2" COIL CONNECTIONS. COIL TO BE INSTALLED IN SUPPLY AIR DUCTWORK ON BCU UNIT SERVED.
RHC-3B	DAIKIN / 5WQ1201B	LOWER LEVEL BAR AREA	FIRST FLOOR MECH. ROOM	BCU-3	HOT WATER HEATING COIL	2300	51.0/75.2	160.0/129.8	4	0.8	60.8	1/12	552.0	0.14	PROVIDE WITH 1 1/2" COIL CONNECTIONS. COIL TO BE INSTALLED IN SUPPLY AIR DUCTWORK ON BCU UNIT SERVED.

	HOT WA	TER B	OILE	ER SC	HEDUI	LE (F	FOR	REF	EREI	NCE ONLY)
DESIG.	MFR./MDL.	TŶPE	-: FUEL	INPUT MBH	OUTPUT MBH	EWT	LWT	GPM		REMARKS
B-1	LOCHINVAR / FBN1251	CONDENSING	NATURAL GAS	1,250 MBH	1,200 MBH	130°	160°	90	7.6'	18 GPM MIN. DATA PROVIDED FOR REFERENCE ONLY.
B-2	LOCHINVAR / FBN1251	CONDENSING	NATURAL GAS	1,250 MBH	1,200 MBH	130°	160°	90	7.6'	18 GPM MIN. DATA PROVIDED FOR REFERENCE ONLY.

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PROJECT NO.

June 21, 2023

21075

HVAC SCHEDULES

SCM ARCHITECTS P. L. L. C.